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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,467	03/28/2005	Per Moller	1175/74121	8292
<div>7590      06/29/2007</div> <div>Cooper &amp; Dunham 1185 Avenue of the Americas New York, NY 10036</div>				
			EXAMINER LAVILLA, MICHAEL E	
			ART UNIT 1775	PAPER NUMBER
			MAIL DATE 06/29/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/529,467

**Applicant(s)**

MOLLER, PER

**Examiner**

Michael La Villa

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7 June 2007 has been entered.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
3. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Regarding Claims 1 and 12, it is unclear what is the full breadth of metal oxide, transition metal, and catalytic metal species. Certain prepared species may not catalyze subsequent precipitation of tried precipitation solutions, but nevertheless be subsequently shown to catalyze others. It is unclear how one of ordinary skill in the art is to ascertain whether a particular catalytic metal prepared according to the claimed method will catalyze an unspecified subsequent precipitation.
6. Regarding Claims 13 and 14, it is unclear what is the relationship between the "autocatalytic deposition" and the claimed "precipitation metal." Does the

autocatalysis mean that the "catalytic metal" and the "precipitation metal" are the same? If not, then it is unclear what is the relationship between the catalytic metal and the subsequent autocatalytic precipitation?

7. Regarding Claims 1 and 12, it is unclear whether the claimed method results in retained metal oxide upon subsequent precipitation. Applicant argues that retained metal oxide is a necessary consequence of the claimed method, but the plain meaning of the claim terms does not appear to require this result.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
9. A person shall be entitled to a patent unless –
10. (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
11. Claims 1-12 and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Cane USPN 5,648,125 for the reasons of record in the Office Action mailed on 4 December 2006.

***Claim Rejections - 35 USC § 102/103***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
13. A person shall be entitled to a patent unless –
14. (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

17. Claims 13-16 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the

alternative, under 35 U.S.C. 103(a) as obvious over Ejerer GB 1,401,600. Ejerer teaches a polymeric substrate that is coated with manganese dioxide, tin ions, and palladium ions and then electroplated with nickel. See Ejerer (page 1, lines 25-70; page 3, lines 35-100; page 4, lines 10-50). To the extent that Ejerer may not teach the claimed product-by-process limitations, it would be expected that the compositional and structural properties of the articles of Ejerer would be identical to or substantially identical to some of those derived from the claimed product-by-process limitations.

18. Claims 13-16 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the

alternative, under 35 U.S.C. 103(a) as obvious over Cane USPN 5,648,125.

Cane is relied upon as above. To the extent that Cane may not teach the claimed product-by-process limitations, it would be expected that the

compositional and structural properties of the articles of Cane would be identical to or substantially identical to some of those derived from the claimed product-by-process limitations.

***Response to Amendment***

19. In view of applicant's amendments and arguments, applicant traverses the section 112, second paragraph rejection of the Office Action mailed on 4 December 2006. Rejections are withdrawn.
20. In view of applicant's amendments and arguments, applicant traverses the section 102 rejection over Ejerer of the Office Action mailed on 4 December 2006. Applicant argues that Ejerer teaches removal of metal oxide, whereas applicant teaches a surface having metal oxide following the pretreating and subsequent plating process. While applicant's exemplified method would appear to result in permanently adsorbed metal oxide and transition metal, the claimed method does not impose this requirement. Moreover, notwithstanding acid removal of much of the metal oxide in Ejerer, it would be expected that at least some residual metal oxide would persist. Hence, the argument is not persuasive, and so rejection is maintained.
21. In view of applicant's amendments and arguments, applicant traverses the section 102 rejection over Cane of the Office Action mailed on 4 December 2006. Applicant argues that Cane should not be interpreted to teach or suggest a metal oxide layer that survives contact with a neutralizing solution and hence should not be interpreted to teach or suggest the presence of such a layer in the

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resulting product of Cane. With respect to Claims 13-16, while applicant's exemplified method would appear to result in permanently adsorbed metal oxide and transition metal, the claimed method does not impose this requirement. More generally, notwithstanding possible acid removal of manganese deposits, it would be expected in Cane that at least some residual metal oxide would persist that would absorb transition metal ions for the same reasons that applicant's material absorbs. Furthermore, applicant bears the burden of providing evidence that contradicts the explicit teaching of Cane of the presence of covalently bonded manganese oxide. Applicant's arguments do not appear to demonstrate that neutralization treatment would sever such covalent bonding relationships. That Cane makes other characterizations of the presence of manganese deposits and that Cane does not require manganese oxide do not lessen the burden on applicant to refute Cane's teaching. Hence, argument's arguments are not persuasive, and so rejection is maintained

### ***Conclusion***

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael La Villa whose telephone number is (571) 272-1539. The examiner can normally be reached on Monday through Friday.


23. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

24. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael La Villa  
19 June 2007

  
MICHAEL E. LAVILLA PH.D.  
PRIMARY EXAMINER